



Central Pollution Control Board
Regional Directorate, Bengaluru



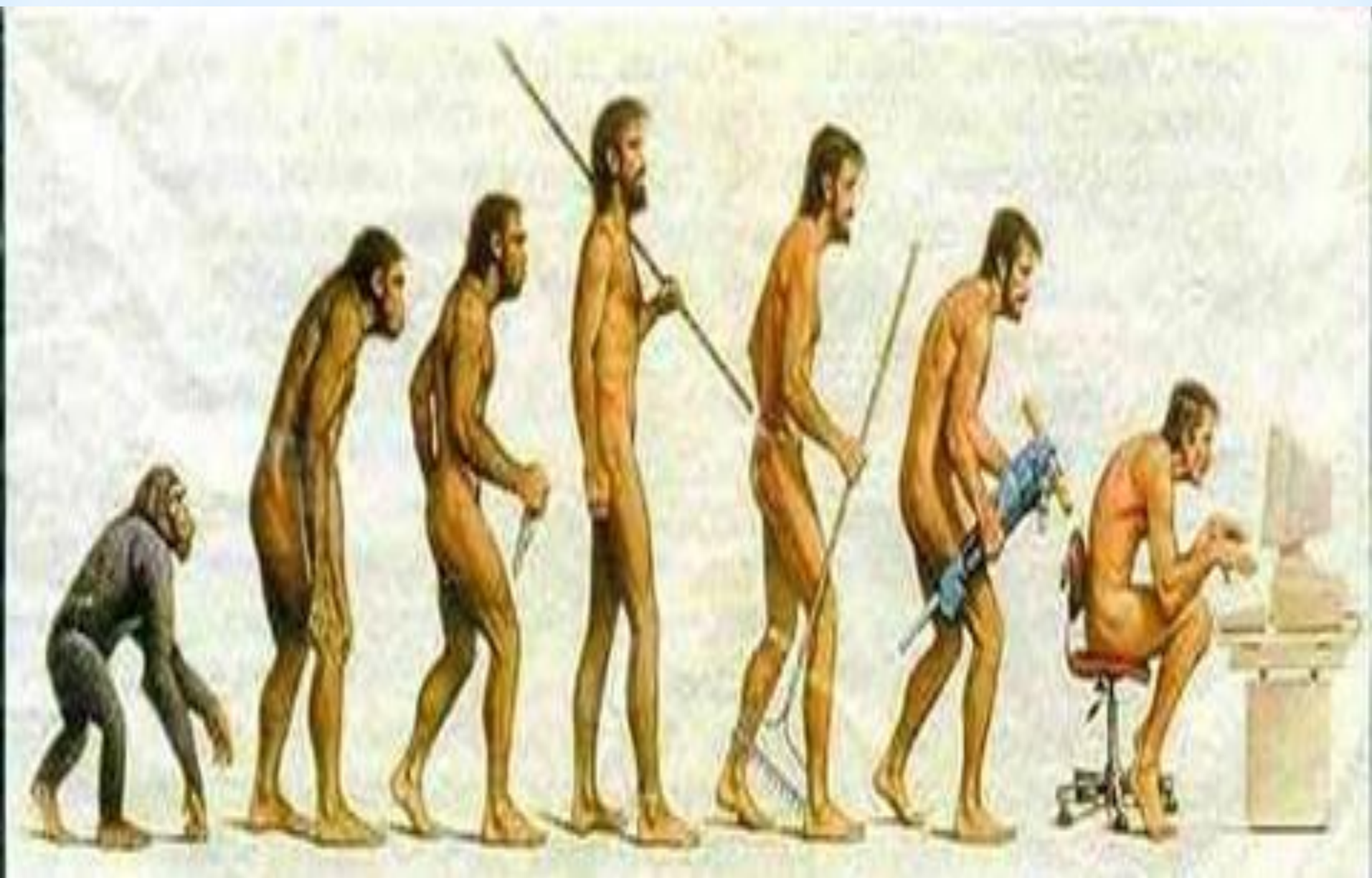
Policy Changes in Solid Waste Management Rules & Hazardous Waste Management Rules

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Stone Age



Iron Age



Golden Age





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Present scenario in the Country

- Generated : 1, 40, 859 TPD
- Collected : 1,27,531 (91%)
- Processed : 34,434 (27 %)
- Compost & vermi-compost plants : 598
- Bio-gas plants : 648
- Refused derived fuel plants : 12
- Waste to Energy (W to E) : 6



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Salient Features of Regulations on Solid Waste Management

http://cpheeo.nic.in/WriteReadData/Cpheeo_SolidWasteManagement2016/Manual.pdf

- Jurisdiction extended
- emphasises source segregation, reuse, recycle and recovery
- enable local bodies to collect 'User Fee' and levy 'Spot Fine',
- separate regime of disposal of diapers and sanitary napkins;
- Bulk generators to have composting
- promotion of city compost marketing;
- enable bringing policy on waste to energy;
- integration of Rag pickers, Kabadiwallas and Self Help Groups etc. in waste collection system;
- SEZ to earmark at least 5% of the total area of the plot or minimum 5 plots/ sheds for recovery and recycling facility.



Duties of Waste Generator

- * Segregate waste into three separate streams namely bio-degradable, non bio-degradable and domestic hazardous wastes in suitable bins and handover segregated wastes to authorized rag-pickers or waste collectors
- * Generator will have to pay 'User Fee' to waste collector and for 'Spot Fine' for Littering and Non-segregation



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Duties of Waste Generator

- * No person shall organize an event or gathering of more than 100 persons at any uncensured place without intimating the local authority, at least three working days in advance. Such person or the organizer of such event shall ensure segregation of waste at source and handing over of waste to waste collector or agency as specified by local authority.
- * Bulk and institutional generators, market associations, event organizers and hotels and restaurants have been made directly responsible for segregation and sorting the waste and manage in partnership with local bodies
- * Every street vendor should keep suitable containers for storage of waste generated during the course of his activity such as food waste, disposable plates, cups, cans, wrappers, coconut shells, leftover food, vegetables, fruits etc. and deposit such waste at waste storage depot or container or vehicle as notified by the local authority
- * The developers of Special Economic Zone, Industrial Estate, Industrial park to earmark at least 5% of the total area of the plot or minimum 5 plots/ sheds for recovery and recycling facility.



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Collection and disposal of Sanitary Waste

- * Shall wrap securely the used sanitary waste like diapers, sanitary pads etc., in the pouches provided by the manufacturers or brand owners of these products or in a suitable wrapping material and shall place the same in the bin meant for dry waste / non- bio-degradable waste
- * The brand owners of sanitary items shall educate the masses and also provide wrapping material for disposal of their products.
- * The manufacturers or Brand owners of disposable products such as tin, glass, plastics packaging etc. shall provide necessary financial assistance to local authorities for establishment of waste management system.



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Duties of Ministry of Urban Development

- * MoUD shall formulate National Policy and Strategy on Solid Waste Management including policy on Waste to Energy in consultation with stakeholders. Review the measures taken by the States and local bodies;
- * Undertake training and capacity building of local bodies ;
- * The national policy on SWM, will be guiding tool for the States/ local authorities in SWM.
- * Providing technical guidelines and project finance to States, UTs and local bodies on solid waste management to facilitate meeting timelines and standards.



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Duties of Ministry of Fertilizers, Government of India

- * Shall provide market development assistance on city compost and ensure promotion of co-marketing of compost with chemical fertilizers in the ratio of 3 to 4 bags: 6 to 7 bags by the fertilizer companies to the extent compost is made available for marketing to the companies.

Duties of Ministry of Agriculture, Government of India.

- * The Ministry of Agriculture shall provide flexibility in Fertiliser Control Order for manufacturing and sale of compost, propagate utilisation of compost on farm land set up laboratories to test quality of compost produced by local authorities or their authorized agencies and issue suitable guidelines for maintaining the quality of compost and ratio of use of compost vis-a-vis chemical fertilizers while applying compost to farmland.



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Duties of the Ministry of Power

- * Ministry of Power shall fix tariff or charges for the power generated from the Waste to Energy plants based on solid waste and ensure compulsory purchase of power generated from such Waste to Energy plants by DISCOMs

Ministry of New & renewable Energy

- * The Ministry of New and Renewable Energy Sources shall facilitate infrastructure creation for Waste to Energy plants and provide appropriate subsidy or incentives for such Waste to Energy plants.
- * Non recyclable waste having calorific value of 1500 KJ/kg or more shall not be disposed of on landfills and shall only be utilized for generating energy either or through refuse derived fuel or by giving away as feed stock for preparing refuse derived fuel.



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Duties of Secretary-Incharge, State Urban Development Department

- * Shall prepare a state policy on solid waste management within a year
- * Ensure identification and allocation of suitable land for setting up processing and disposal facilities for solid wastes within one year and incorporate them in the master plan
- * Notify buffer zone for the solid waste processing and disposal facilities of more than 5 tons per day in consultation with the State Pollution Control Board and
- * Start a scheme on registration of waste pickers and waste dealers



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Duties of Urban Local Body

- * Prepare a solid waste management plan as per State Policy within six months
- * Arrange for door to door collection of segregated solid waste;
- * Integrate rag pickers / informal waste collectors in solid waste management
- * Establish waste deposition centre/s for domestic hazardous waste and ensure safe storage and transportation of the domestic hazardous waste to the hazardous waste disposal facility or as may be directed by the state pollution control board/ committee;



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Duties of Urban Local Body

- * All industrial units using fuel and located within 100 km from solid waste based RDF plant shall make arrangements within six months from the date of notification of these rules to replace at least 5 % of their fuel requirement by RDF so produced



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*Waste management hierarchy has been introduced as follows:

- Prevention
- Minimization
- Reuse
- Recycling
- Recovery, utilisation including co-processing
- Safe disposal



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Hon'ble NGT Direction- 28 points

<http://bspcb.bih.nic.in/NGT%20Judgment%20dt%2022.12.2016%20in%20OA199%20%20of%202014,%20Almitra%20H%20Patel%20Vs%20Union%20of%20India.pdf>

- * Every state & UT shall enforce SWM, 2016 without any further delay
- * State Governments shall prepare action plan within four week and take steps for time bound implementation
- * State will comply within six months w.e.f 1st January, 2017
- * If the State or UT violates this provision, action may be taken as per E (P) act and are liable to pay environmental compensation
- * All departments shall work in co-ordination

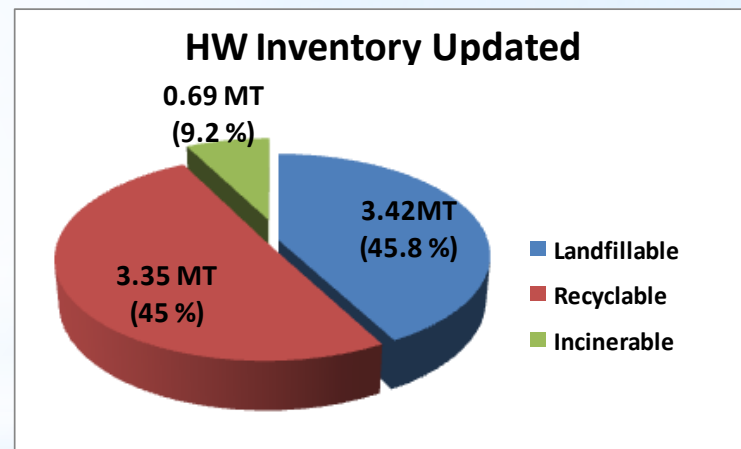


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Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and Guidelines on Implementing Liabilities & Fines

- * Generation : 7.46 Million MTA (Landfillable-3.42; Incinerable-0.69)
- * Recyclable : 3.35 MTA)
- * No of industries : 43938
- * Registered recyclers : 1080
- * Cement plants co-processing permitted : 47
- * Industries hazardous waste utilisation permitted: 108
- * Common Hazardous Waste TSDFs in 17 States/UTs: 40





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Hazardous Waste Generation in States/UTs

- Gujarat (about 29%), Maharashtra (about 25%) and Andhra Pradesh (about 9%) are the top three HW generating States.
- Chhattisgarh (about 5%), Rajasthan, West Bengal and Tamil Nadu (about 4 %)
- These seven States together, are generating about 80 % of country's total hazardous waste.



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Salient Features of Regulations on Hazardous Waste Management

- Definition of Hazardous Wastes (HW)
- Responsibilities of the occupier for handling of HW
- Provisions of requirement of authorization for handling HW.
- Provisions for Packaging, Labeling and Transportation of HW
- Procedure for treatment, storage and disposal facilities of HW
- Records and returns pertaining to HW generation and their disposal
- Procedure for recycling or utilization of HW



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Major Amendments compared to earlier Rules

Title of the Rules has been amended as Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

Major Amendments made in following areas

Authorization / Renewal of authorization (introduced new forms, compliance verification report , Emergency Response Plans and undertaking for submitting bank guarantee)

New Schedule-II for identification of HW

Utilization of Hazardous waste includes Schedule IV wastes also.

SoPs for recycling/utilization introduced

Pass books applicable for all actual users

Removal of Registration scheme

Responsibilities of State Government

Revised Import-Export provisions (Banned items 49 from 30; more clarity)

Filing of Annual Reports by SPCBs & CPCB



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Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

New Definitions added:

- Captive Treatment, storage and disposal facility
- Common Treatment, storage and disposal facility
- Co-processing
- Critical care medical equipment
- Pre-processing
- Utilisation
- Waste & byproduct
- Other waste

-More clarity in earlier definitions



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Responsibilities of State Government (New inclusion)

Department of Industry in the State or any other government agency - to earmark or allocate industrial space or shed for recycling, pre-processing and other utilisation of hazardous or other waste in the existing and upcoming industrial park, estate and industrial clusters.

Submit annual report to the Ministry of Environment, Forest and Climate Change on integrated plan for ensuring environmentally Sound Management of Hazardous and other wastes.

Department of Labour in the State or any other government agency shall ensure the following in respect of workers involved in recycling, pre-processing and other utilisation of HW ;

- a) Recognition and Registration of workers
- b) Imparting industrial skill development activities
- c) Monitoring safety and health of workers.



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New Provisions in Grant of authorization

Occupier shall obtain an authorization / renewal of authorisation from the State Pollution Control Board in Modified **Form 1**. Applicant shall enclose copies of CTE, valid CTO. A Self certified compliance report shall be enclosed in case of renewal application.

State Pollution Control Board shall grant authorisation in Modified **Form 2** after ensuring technical capabilities and equipment complying with the Standard Operating Procedures or other guidelines specified by CPCB through site inspection.

The authorisation granted shall be accompanied with copy of field inspection report signed by that Board.

Handing over of the hazardous and other wastes to the authorised actual user shall be only after making the entry into the passbook of the actual user

Includes Authorization for recycling of Other wastes listed in Schedule - III



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Salient features in Form 1 for Grant of Authorization

For authorization/renewal of authorization, the occupier shall submit;

- copies of ARs (last 03 years)
- compliance report of EC
- quantity handled
- quantity generated
- quantity of products and by-products
- Characteristics (Waste-wise)
- Emergency Response Plan(ERP)
- Undertaking
- Captive disposal/utilisation facilities
- Arrangement details for transportation
- Wastes generated from storage of chemicals
- Quantity received in case of actual users



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Utilization of hazardous and other wastes (Major Changes)

Rule-9 : provisions of Recycling and Utilization of HW

- (1) SPCBs/PCCS may grant authorisation to actual users for utilization or recycling of Hazardous Wastes for which Standard Operating Procedures (SoPs) or guidelines have been provided by CPCB
- (2) Where SoPs or guidelines are not available, the applicants shall approach CPCB for grant of approval, which may be given by CPCB on the basis of trial runs.

Upon completion of successful trial run, CPCB shall prepare SoPs for such Utilization and circulate the same to all SPCBs.

- (3) No trial runs are required for co-processing once the co-processing standards are notified.
However, till the time the standards are notified, the procedure as specified at (2) above shall be followed.



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Import & Export of Hazardous and Other Waste

MoEF shall be the nodal Ministry for Transboundary movement of hazardous and other wastes

No import for disposal shall be permitted.

Import permitted only for recycling, recovery, reuse and utilisation including co-processing

Export is permitted subject to PIC from importing country

No import of Schedule VI item shall be permitted

Import of hazardous and other wastes listed under Part A and Part B of Schedule-III shall require permission from MoEF & CC with PIC of the exporting country in respect of only Part A wastes;

Import of other wastes listed in Part D of Schedule III shall not require MOEF&CC permission. However, the Custom Authorities shall verify the documents given in Schedule VIII (New addition)

Samples of hazardous and other wastes (1000 gm or 1000 ml) imported for testing of R&D purposes are exempted from taking any permission



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Import & Export of Hazardous and Other Waste (Contd.)

A person intending to import or transit for trans-boundary movement of hazardous and other wastes specified in Schedule-III shall apply in **Form 5 (Amended)** and simultaneously, to the SPCB to enable them to send their comments and observations, if any

Importer of other wastes listed in Part D shall furnish the information in **Form 6 (Amended)** to the Custom Authorities alongwith the document listed in **Schedule VIII (New)**.

Importer need to obtain extended producer responsibility-authorisation as producer under the said E-Waste (Management) Rules, for import of any used electrical and electronic assemblies or spares or part or component or consumables listed in Part B of Schedule III.

Exporter of hazardous and other waste shall apply in Form 5 alongwith insurance cover and PIC from importing country to MOEF&CC.



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Illegal traffic

(1) The export and import of hazardous or other wastes shall be deemed illegal, if,-

- it is without permission of the Central Government; or
- the permission has been obtained through falsification, mis-representation or fraud; or
- it does not conform to the shipping details provided in the movement documents; or
- it results in deliberate disposal (i.e., dumping) of hazardous or other waste.

(2) In case of illegal import of the hazardous or other waste, the importer shall re-export the waste in question at his cost within a period of 90 days from the date of its arrival into India and its implementation will be ensured by the concerned Port and the Custom authority. In case of disposal of such waste by the Port and Custom authorities, they shall do so in accordance with these rules with the permission of the Pollution Control Board of the State where the Port exists.

(3) In case the importer is not traceable then the waste either can be sold by the Customs authority to any user having authorisation under these rules from the concerned State Pollution Control Board or can be sent to authorised treatment, storage and disposal facility



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Treatment, Storage & Disposal Facilities (Minor Changes)

The State Government, occupier, operator of a facility or any association of occupiers shall individually or jointly or severally be responsible for, identification of sites for establishing the facility for treatment, storage and disposal of the hazardous.

Operator of common or **captive** TSDF shall obtain approval from the SPCB for design and layout of TSDF.

SPCB shall monitor the setting up and operation of **captive**/Common TSDF.

Operator of common or **captive** TSDF shall be responsible for safe and environmentally sound operation and **its closure and post-closure phase**.



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Transportation of Hazardous Waste

The **sender** of the waste shall obtain 'No Objection Certificate' from the SPCB of both the States for transportation of waste in case of final disposal to a facility existing in a State other than the State where the hazardous waste is generated.

In case of transit of waste for recycling, recovery, reuse or utilisation through a State other than the State of origin or destination, the occupier shall intimate the concerned SPCB before he hands over the hazardous wastes to the transporter.

The authorisation for transportation shall either be obtain by the **sender or the receiver** on whose behalf the transport is being arranged.

Gray color Manifest - shall only be sent to the SPCB of the sender in case sender is in another State



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Amendments in Schedules

- Schedule I- List of processes generating hazardous wastes is revised
- Schedule II revised completely for identification of HW
 - Class A- List of Waste Constituents with Concentration Limits based on Leachable concentration (mg/l) i.e. TCLP and STLC.
 - *Class B- List of Waste Constituents with Concentration Limits Based on Total threshold limit concentration in mg/kg*
 - Class C- Characteristic i.e. the waste exhibits any of the characteristics due to the presence of any hazardous constituents has been revised based on Flammable, Corrosive, Reactive, Toxic, Spontaneous Combustion, In contact with water emits flammable gases, Oxidizing, Organic Peroxides, Poisons, Infectious substances, liberation of toxic gases, Eco-toxic and Capable



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Thank you 😊

